

wherein, the radicals  $R_1$  and  $R_2$ , equal to or different from each other, are a  $C_1$ - $C_{20}$  linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl or alkylaryl group, optionally containing heteroatoms; the radicals  $R_3$  to  $R_6$  equal to or different from each other, are hydrogen or a  $C_1$ - $C_{20}$  linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl or alkylaryl group, optionally containing heteroatoms, and the radicals  $R_3$  to  $R_6$  which are joined to the same carbon atom can be linked together to form a cycle; with the proviso that when  $R_3$  to  $R_5$  are contemporaneously hydrogen,  $R_6$  is a radical selected from the group consisting of primary branched, secondary [or] and tertiary alkyl groups, cycloalkyl, aryl, arylalkyl [or] and alkylaryl groups having from 3 to 20 carbon atoms.

2. (Amended) The [C]catalyst component according to claim 1 in which the electron donor [compound] of formula (I) is selected from those in which  $R_1$  and  $R_2$  are  $C_1$ - $C_8$  alkyl, cycloalkyl, aryl, arylalkyl [and] or alkylaryl groups.

3. (Amended) The [C]catalyst component[s] according to claim 2 in which  $R_1$  and  $R_2$  are selected from the group consisting of primary alkyls.

4. (Amended) The [C]catalyst component according to claim 1 in which the electron donor [compound] of formula (I) is selected from those in which  $R_3$  to  $R_5$  are hydrogen and  $R_6$  is a branched alkyl, cycloalkyl, aryl, arylalkyl [and] or alkylaryl radical having from 3 to 10 carbon atoms.

In claim 5, line 1, delete "Catalyst" and substitute therefor --The catalyst--.

A2 5 6. (Amended) The [C]catalyst component according to claim 1 in which the electron donor [compound] of formula (I) is selected from those in which at least two radicals from R<sub>3</sub> to R<sub>6</sub> are different from hydrogen and are selected from the group consisting of C<sub>1</sub>-C<sub>20</sub> linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl [or] and alkylaryl groups optionally containing heteroatoms.

In claim 7, line 1, delete "Catalyst" and substitute therefor --The catalyst--.

In claim 8, line 1, delete "Catalyst" and substitute therefor --The catalyst--.

A3 9. (Amended) The [C]catalyst component according to claim 8 in which the succinate of formula (I) is selected from the group consisting of diethyl 2,3-diisopropylsuccinate, diisobutyl 2,3-diisopropylsuccinate, di-n-butyl 2,3-diisopropylsuccinate, diethyl 2,3-dicyclohexyl-2-methylsuccinate, diisobutyl 2,3-dicyclohexyl-2-methylsuccinate, diisobutyl 2,2-dimethylsuccinate, diethyl 2-ethyl-2-methylsuccinate, diisobutyl 2-ethyl-2-methylsuccinate, diethyl 2-(cyclohexylmethyl)-3-ethyl-3-methylsuccinate, and diisobutyl 2-(cyclohexylmethyl)-3-ethyl-3-methylsuccinate.

In claim 10, line 1, delete "A solid" and substitute therefor --The--.

In claim 10, line 1, delete "any of the preceding claims" and substitute therefor --claim 1--.

In claim 11, line 1, delete "A solid" and substitute therefor --The--.

In claim 11, line 1, delete "any of the preceding claims" and substitute therefor --claim 1--.

In claim 12, line 1, delete "A solid" and substitute therefor --The--.

In claim 12, line 1, delete "11" and substitute therefor --9--.

A4 13. (Amended) The [A solid] catalyst component according to [any of the preceding] claim[s] 1 wherein the Ti [comprising a titanium] compound [having] has at least a Ti-halogen bond and wherein the succinate of formula (I) is supported on a Mg dichloride in active form.

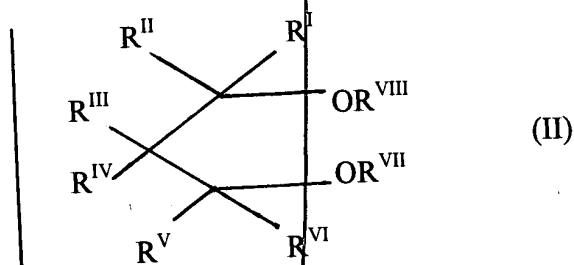
In claim 14, line 1, delete "A solid" and substitute therefor --The--.

In claim 14, line 1, delete "10" and substitute therefor --13--.

15. (Amended) The [A solid] catalyst component according to [any of the preceding] claim 1 further comprising [another] an additional electron donor compound in addition to the succinate of formula (I).

16. (Amended) The [A solid] catalyst component according to claim 15 in which the additional electron donor compound is selected from the group consisting of ethers, esters of organic mono or dicarboxylic acids and amines.

17. (Amended) The [A solid] catalyst component according to claim 16 in which the additional electron donor compound is selected from the group consisting of (i) 1,3-propanediethers of formula (II):



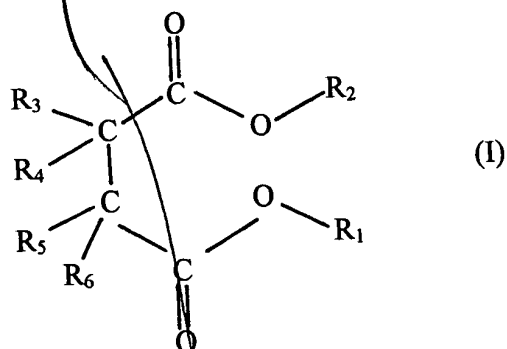
wherein  $R^I$ ,  $R^{II}$ ,  $R^{III}$ ,  $R^{IV}$ ,  $R^V$  and  $R^{VI}$ , equal or different from each other, are hydrogen or hydrocarbon radicals having from 1 to 18 carbon atoms, and  $R^{VII}$  and  $R^{VIII}$ , equal or different from each other, have the same meaning of  $R^I$ - $R^{VI}$  except that they cannot be hydrogen; and wherein one or more of the  $R^I$ - $R^{VIII}$  groups can be linked to form a cycle and (ii) esters of organic mono or dicarboxylic acids.

18. (Amended) The [A solid] catalyst component according to claim 17 in which the additional electron donor compound is selected from the group consisting of phthalates [or] and the 1,3-diethers of formula (II) in which  $R^{VII}$  and  $R^{VIII}$  are selected from  $C_1$ - $C_4$  alkyl radicals,  $R^{III}$  and  $R^{IV}$  form a condensed unsaturated cycle and  $R^I$ ,  $R^{II}$ ,  $R^V$  and  $R^{VI}$  are hydrogen.

19. (Amended) A catalyst for the polymerization of olefins  $CH_2=CHR$ , in which R is hydrogen or a hydrocarbyl radical with 1-12 carbon atoms, comprising the product of the reaction between:

(a) [the solid catalyst component of any of the claims 1-18] a solid catalyst component for the polymerization of olefins  $CH_2=CHR$ , in which R is hydrogen or a hydrocarbyl radical with 1-12

carbon atoms, comprising Mg, Ti, halogen and an electron donor selected from succinates of formula (I):



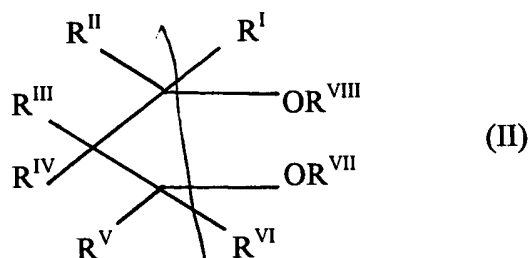
wherein the radicals  $R_1$  and  $R_2$ , equal to or different from each other, are a  $C_1$ - $C_{20}$  linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl or alkylaryl group, optionally containing heteroatoms; the radicals  $R_3$  to  $R_6$ , equal to or different from each other, are hydrogen or a  $C_1$ - $C_{20}$  linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl or alkylaryl group, optionally containing heteroatoms, and the radicals  $R_3$  to  $R_6$  which are joined to the same carbon atom can be linked together to form a cycle, with the proviso that when  $R_3$  to  $R_5$  are contemporaneously hydrogen,  $R_6$  is a radical selected from the group consisting of primary branched, secondary and tertiary alkyl groups, cycloalkyl, aryl, arylalkyl and alkylaryl groups having from 3 to 20 carbon atoms;

- (b) an alkylaluminum compound and, optionally,
- (c) one or more external electron donor compounds [(external donor)].

In claim 20, line 1, delete "Catalyst" and substitute therefor --The catalyst--.

21. (Amended) The [C]catalyst according to claim 20 in which the trialkylaluminum compound is selected from the group consisting of triethylaluminum, triisobutylaluminum, tri-n-butylaluminum, tri-n-hexylaluminum, and tri-n-octylaluminum.

22. (Amended) The [C]catalyst according to claim 19 in which the external donor (c) is selected from the 1,3-diethers of the general formula (II):



wherein  $R^I$ ,  $R^{II}$ ,  $R^{III}$ ,  $R^{IV}$ ,  $R^V$  and  $R^{VI}$ , [are] equal or different [to] from each other, are hydrogen or hydrocarbon radicals having from 1 to 18 carbon atoms, and  $R^{VII}$  and  $R^{VIII}$ , equal or different from each other, have the same meaning of  $R^I$ - $R^{VI}$  except that they cannot be hydrogen; and wherein one or more of the  $R^I$ - $R^{VIII}$  groups can be linked to form a cycle.

In claim 23, line 1, delete "Catalyst" and substitute therefor --The catalyst--.

In claim 24, line 1, delete "Catalyst" and substitute therefor --The catalyst--.

25. (Amended) The [C]catalyst according to claim 19 in which the external donor (c) is a silicon compound of the formula  $R_a^7 R_b^8 Si(OR^9)_c$ , [where] wherein a and b are integers from 0 to 2, c is an integer from 1 to 4 and the sum (a+b+c) is 4[;], and  $R^7$ ,  $R^8$  and  $R^9$  are [C1-C18] C<sub>1</sub>-C<sub>18</sub> hydrocarbon groups optionally containing heteroatoms.

In claim 26, line 1, delete "Catalyst" and substitute therefor --The catalyst--.

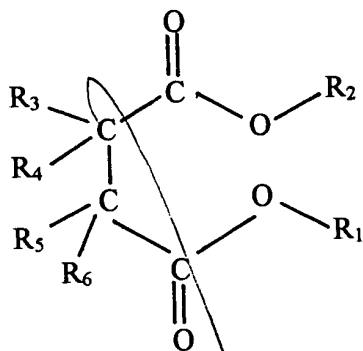
27. (Amended) The [C]catalyst according to claim 25 [or 26] in which  $R^7$  and/or  $R^8$  are branched alkyl, cycloalkyl or aryl groups with 3-10 carbon atoms optionally containing heteroatoms and  $R^9$  is a C<sub>1</sub>-C<sub>10</sub> alkyl group [in particular methyl].

In claim 28, line 1, delete "Catalyst" and substitute therefor --The catalyst--.

29. (Amended) A catalyst for the polymerization of olefins  $CH_2=CHR$ , in which R is hydrogen or a hydrocarbyl radical with 1-12 carbon atoms, comprising the product of the reaction between:

- (i) a solid catalyst component comprising Mg, Ti, halogen and an internal electron donor (d);
- (ii) an alkylaluminum compound and,
- (iii) a succinate of formula (I);

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(I)

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wherein the radicals  $R_1$  and  $R_2$ , equal to or different from each other, are a  $C_1$ - $C_{20}$  linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl or alkylaryl group, optionally containing heteroatoms; the radicals  $R_3$  to  $R_6$  equal to or different from each other, are hydrogen or a  $C_1$ - $C_{20}$  linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl or alkylaryl group, optionally containing heteroatoms, and the radicals  $R_3$  to  $R_6$  which are joined to the same carbon atom can be linked together to form a cycle; with the proviso that when  $R_3$  to  $R_5$  are contemporaneously hydrogen,  $R_6$  is a radical selected from the group consisting of primary branched, secondary and tertiary alkyl groups, cycloalkyl, aryl, arylalkyl and alkylaryl groups having from 3 to 20 carbon atoms.

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In claim 30, line 1, delete "Catalyst" and substitute therefor --The catalyst--.

In claim 31, line 1, delete "Catalyst" and substitute therefor --The catalyst--.

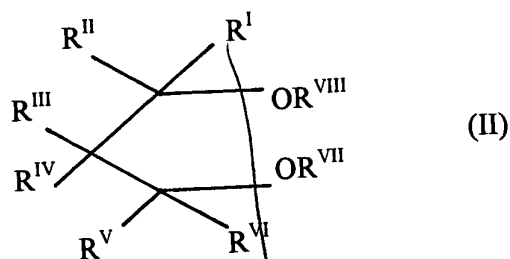
In claim 31, line 1, delete "component".

In claim 32, line 1, delete "Catalyst" and insert instead --The catalyst--.

In claim 32, line 1, after "from" insert --the group consisting of--.

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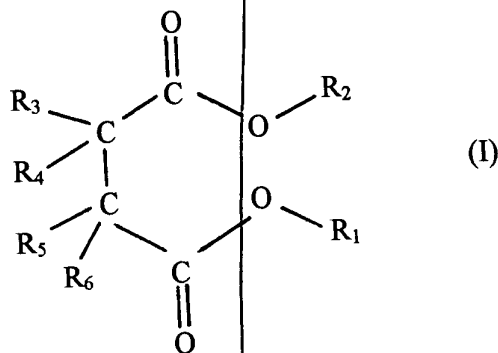
33. (Amended) The [C]catalyst according to claim 32 in which the internal donor (d) is selected from the group consisting of (i) 1,3-propanediethers of formula (II):



10 wherein  $R^I$ ,  $R^{II}$ ,  $R^{III}$ ,  $R^{IV}$ ,  $R^V$  and  $R^{VI}$ , equal or different from each other, are hydrogen or hydrocarbon radicals having from 1 to 18 carbon atoms, and  $R^{VII}$  and  $R^{VIII}$ , equal or different from each other, have the same meaning of  $R^I$ - $R^{VI}$  except that they cannot be hydrogen; and wherein one or more of the  $R^I$ - $R^{VIII}$  groups can be linked to form a cycle and (ii) esters of organic mono or dicarboxylic acids.

34. (Amended) The [C] catalyst according to claim 33 in which the internal donor (d) is selected from the group consisting of phthalates [or] and the 1,3-diethers of formula (II) in which  $R^{VII}$  and  $R^{VIII}$  are selected from  $C_1$ - $C_4$  alkyl radicals,  $R^{III}$  and  $R^{IV}$  form a condensed unsaturated cycle and  $R^I$ ,  $R^{II}$ ,  $R^V$  and  $R^{VI}$  are hydrogen.

35. (Amended) A prepolymerized catalyst component for the polymerization of olefins  $CH_2=CHR$ , wherein R is hydrogen or a  $C_1$ - $C_{12}$  alkyl group, [characterized by comprising a solid catalyst component according to claim 1-10] wherein the prepolymerized catalyst component comprises a solid for the polymerization of olefins  $CH_2=CHR$ , in which R is hydrogen or a hydrocarbyl radical with 1-12 carbon atoms, comprising Mg, Ti, halogen and an electron donor selected from succinates of formula (I):



15 wherein the radicals  $R_1$  and  $R_2$ , equal to or different from each other, are a  $C_1$ - $C_{20}$  linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl or alkylaryl group, optionally containing

heteroatoms; the radicals  $R_3$  to  $R_6$  equal to or different from each other, are hydrogen or a  $C_1$ - $C_{20}$  linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl or alkylaryl group, optionally containing heteroatoms, and the radicals  $R_3$  to  $R_6$  which are joined to the same carbon atom can be linked together to form a cycle; with the proviso that when  $R_3$  to  $R_5$  are contemporaneously hydrogen,  $R_6$  is a radical selected from the group consisting of primary branched, secondary and tertiary alkyl groups, cycloalkyl, aryl, arylalkyl and alkylaryl groups having from 3 to 20 carbon atoms and which solid for the polymerization of olefins  $CH_2=CHR$  has been prepolymerized with an olefin to such an extent that the amount of the olefin pre-polymer is from 0.2 to 500 g per g of solid catalyst component.

In claim 36, line 1, delete "Prepolymerized" and substitute therefor --The prepolymerized--.

37. (Amended) A [P]rocess for the (co)polymerization of olefins  $CH_2=CHR$ , in which R is hydrogen or a hydrocarbyl radical with 1-12 carbon atoms, carried out in the presence of [any of] the catalyst[s] of [claims 19-36] claim 19.

In claim 38, line 1, delete "Process" and substitute therefor --The process--.

In claim 38, line 1, after "from" insert --the group consisting of--.

40. (Amended) The [P]ropylene polymers according to claim 39 in which the polydispersity index is higher than 5.1, the flexural modulus is higher than 2100 MPa and the [percent of propylene units in form of] content of isotactic units expressed in terms of pentads is higher than 97.5%.

Please add the following new claims:

41. (New) The catalyst according to claim 27 wherein  $R^9$  is a methyl group.

42. (New) A process for the (co)polymerization of olefins  $CH_2=CHR$ , in which R is hydrogen or a hydrocarbyl radical with 1-12 carbon atoms, carried out in the presence of the catalyst of claim 29.

43. (New) A process for the (co)polymerization of olefins  $CH_2=CHR$ , in which R is hydrogen or a hydrocarbyl radical with 1-12 carbon atoms, carried out in the presence of the catalyst of claim 35.